

Notice of Allowability

Application No.

10/044,648

Examiner

Tina M Lin

Applicant(s)

EDWARDS ET AL.

Art Unit

2874

-- The MAILING DATE of this communication appears in the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05 April 2004, amendment.
2. ☒ The allowed claim(s) is/are 1-29.
3. ☒ The drawings filed on 20 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date attached.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Applicant's arguments filed on 05 April 2004 have been fully considered. Claims 1-29 are therefore allowed with the additional limitations included as a result of a telephone interview/examiner's amendment and the arguments presented.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claim 1 has been amended as follows:

1. Light source monitoring apparatus comprising:

a light source designed to produce a beam of light, the light source including drive electronics connected to the light source to supply an amount of drive current to the light source;

a monitor diode connected to the drive electronics for controlling the amount of drive current supplied to the light source by the drive electronics;

a lens system positioned to receive the beam of light from the light source and transmit substantially all of the beam of light to a light terminal, the lens system being separate from the light terminal and including an optical element; and

a light reflecting surface on the optical element positioned to reflect a portion of the beam of light onto the monitor diode.

Claim 12 has been amended as follows:

12. Light source monitoring apparatus comprising:

a light source designed to produce a beam of light, the light source including drive electronics connected to the light source to supply an amount of drive current to the light source;

a monitor diode connected to the drive electronics for controlling the amount of drive current supplied to the light source by the drive electronics;

a lens system positioned to receive the beam of light from the light source and transmit substantially all of the beam of light along an optical axis to a light terminal, the lens system being separate from the light terminal and including a first lens element positioned along the optical axis and adjacent the light source and a second lens element positioned along the optical axis and adjacent to the light terminal; and

a light reflecting surface in the lens system and positioned along the optical axis to reflect a portion of the beam at an angle to the optical axis onto the monitor diode.

Claim 22 has been amended as follows:

22. Light source monitoring apparatus comprising:

a first structural portion;

a light source mounted by the first structural portion and designed to produce a beam of light, the light source including drive electronics connected to the light source to supply an amount of drive current to the light source;

a first lens element mounted by the first structural portion and positioned adjacent to the light source;

a second structural portion, the second structural portion being constructed to receive an optical fiber in optical communication therewith;

a second lens element mounted by the second structural portion and positioned to be adjacent but separate from an end of the optical fiber, the first and second lens elements defining an optical axis; and

a light reflecting surface positioned along the optical axis between the first and second lens elements to reflect a portion of the beam at an angle to the optical axis onto the monitor diode.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Parsons on 28 April 2004.

Examiner's Statement Of Reasons For Allowance

The following is an examiner's statement of reasons for allowance: The prior art of record in this application fails to disclose or reasonably suggest a light source monitoring apparatus with a light source and a monitoring diode with drive electronics connected to them to supply the proper amount of drive current and a lens system positioned to receive light from the light source transmit a substantial portion of the light to a light terminal or optical fiber and a reflecting surface element in the lens system to reflect a portion of the light onto the monitoring diode where the light terminal and the lens system are separate elements in the apparatus. The prior art fails to disclose the combination all of the elements disclosed above by Applicant above, but more specifically, the prior art fails to disclose the optical lens system to be separate from the light terminal. The closest prior art of record is U.S. Patent 6,529,535 B2 to Katayama et al. and relied on in the previous Office action mailed 02 December 2003.. Katayama et al. discloses a laser light source, a monitoring diode, a lensed fiber with an optical element positioned to receive light, and a reflecting surface on the optical element positioned to reflect a portion of the light onto the monitoring diode. But Katayama et al. fails to disclose a drive electronics system connected to the light source and the monitoring diode to drive the current and control the current supplied to the light source and for the lens system to be separate from the light terminal. Instead, Katayama et al. discloses a lensed tipped optical fiber, a combination of the lens system and the light terminal, instead of being two separate optical components.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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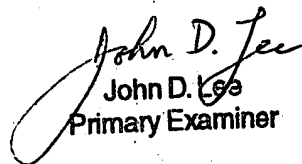
fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M Lin whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TML


John D. Lee
Primary Examiner